

Table 1 Coordination with appropriate agencies							
Coordinating Agencies ^{1,2}	Participated in developing the plan	Commented on the draft	Attended public meetings	Was contacted for assistance	Was sent a copy of the draft plan	Was sent a notice of intention to adopt	Not involved / No information
Other water suppliers	X	X		X	X	X	
Water mgmt agencies	X	X		X	X	X	
Relevant public agencies	X	X		X	X		
General public					X		
Other					X		

¹ Indicate the specific name of the agency with which coordination or outreach occurred.
² Check at least one box in each row.

Table 2 Population — current and projected							
	2010	2015	2020	2025	2030	2035 - optional	Data source ²
Service area population ¹	26,066	27,369	28,738	30,175	31,683		Ca. DOF +.5%

¹ Service area population is defined as the population served by the distribution system. See Technical Methodology 2: Service Area Population (2010)
² Provide the source of the population data provided.

Table 3 Water deliveries — actual, 2005					
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Water use sectors					
Single family	7,877	1,659			1,659
Multi-family	700	438			438
Commercial	998	881			881
Industrial	117	214			214
Institutional/governmental					0
Landscape					0
Agriculture					0
Other					0
Total	9,692	3,192	0	0	3,192

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 4 Water deliveries — actual, 2010					
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Water use sectors					
Single family	7,902	1,459			1,459
Multi-family	758	411			411
Commercial	1,192	1,079			1,079
Industrial	NA				0
Institutional/governmental	NA				0
Landscape	NA				0
Agriculture	NA				0
Other	NA				0
Total	9,852	2,949	0	0	2,949

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 5 Water deliveries — projected, 2015					
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Water use sectors					
Single family	8,099	1,620			1,620
Multi-family	777	451			451
Commercial	1,222	1,160			1,160
Industrial					0
Institutional/governmental					0
Landscape					0
Agriculture					0
Other					0
Total	10,098	3,231	0	0	3,231

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 6 Water deliveries — projected, 2020					
	Metered		Not metered		Total
	# of accounts	Volume	# of accounts	Volume	Volume
Water use sectors					
Single family	8,301	1,660			1,660
Multi-family	796	462			462
Commercial	1,253	1,190			1,190
Industrial					0
Institutional/governmental					0
Landscape					0
Agriculture					0
Other					0
Total	10,350	3,312	0	0	3,312

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 7 Water deliveries — projected 2025, 2030, and 2035						
Water use sectors	2025		2030		2035 - optional	
	metered		metered		metered	
	# of accounts	Volume	# of accounts	Volume	# of accounts	Volume
Single family	8,509	1,702	8,722	1,744		
Multi-family	816	473	836	485		
Commercial	1,284	1220	1,316	1250		
Industrial						
Institutional/governmental						
Landscape						
Agriculture						
Other						
Total	10,609	3,395	10,874	3,479	0	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 8 Low-income projected water demands						
Low Income Water Demands ¹	2015	2020	2025	2030	2035 - opt	
Single-family residential	794	813	853	896		
Multi-family residential	1,725	1,765	1,853	1,946		
Total	2,519	2,578	2,706	2,842	0	

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Provide demands either as directly estimated values or as a percent of demand.

Table 9 Sales to other water agencies							
Water distributed	2005	2010	2015	2020	2025	2030	2035 - opt
Humboldt Community Services District	475	445	522	522	522	522	
name of agency							
name of agency							
Total	475	445	522	522	522	522	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 10 Additional water uses and losses							
Water use ¹	2005	2010	2015	2020	2025	2030	2035 -opt
Saline barriers	NA	NA	NA	NA	NA	NA	
Groundwater recharge	NA	NA	NA	NA	NA	NA	
Conjunctive use	NA	NA	NA	NA	NA	NA	
Raw water	NA	NA	NA	NA	NA	NA	
Recycled water	NA	NA	NA	NA	NA	NA	
System losses	505	836	752	677	609	548	
Other (define)	NA	NA	NA	NA	NA	NA	
Total	505	836	752	677	609	548	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Any water accounted for in Tables 3 through 7 are not included in this table.

Table 11 Total water use							
Water Use	2005	2010	2015	2020	2025	2030	2035 - opt
Total water deliveries (from Tables 3 to 7)	3192	2,949	3231	3312	3395	3,479	
Sales to other water agencies (from Table 9)	475	445	522	522	522	522	
Additional water uses and losses (from Table 10)							
Total	3,667	3,394	3,753	3,834	3,917	4,001	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 12 Retail agency demand projections provided to wholesale suppliers							
Wholesaler	Contracted Volume ³	2010	2015	2020	2025	2030	2035 -opt
Hum.Bay Muni.Water Dist.	N/A	4856	4977	5101	5229	5360	

Table 13 Base period ranges			
Base	Parameter	Value	Units
10- to 15-year base period	2008 total water deliveries	3082	see below
	2008 total volume of delivered recycled water	0	see below
	2008 recycled water as a percent of total del	0	percent
	Number of years in base period ¹	10	years
	Year beginning base period range	2001	
5-year base period	Year ending base period range ²	2010	
	Number of years in base period	5	years
	Year beginning base period range	2006	
	Year ending base period range ³	2010	

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ If the 2008 recycled water percent is less than 10 percent, then the first base period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first base period is a continuous 10- to 15-year period.

² The ending year must be between December 31, 2004 and December 31, 2010.

³ The ending year must be between December 31, 2007 and December 31, 2010.

Table 14 Base daily per capita water use — 10- to 15-year range				
Base period year		Distribution System Population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
Year 1	2001	26,134	3,617	138
Year 2	2002	26,182	3,619	138
Year 3	2003	26,309	3,219	122
Year 4	2004	26,378	3,230	122
Year 5	2005	26,360	3,301	125
Year 6	2006	26,327	3,266	125
Year 7	2007	26,083	3,329	128
Year 8	2008	26,031	3,321	128
Year 9	2009	25,994	3,378	130
Year 10	2010	26,066	3,370	129
Year 11				
Year 12				
Year 13				
Year 14				
Year 15				
Base Daily Per Capita Water Use ¹				128.5

¹ Add the values in the column and divide by the number of rows.

Table 15 Base daily per capita water use — 5-year range				
Base period year		Distribution System Population	Daily system gross water use (mgd)	Annual daily per capita water use (gpcd)
Sequence Year	Calendar Year			
Year 1	2006	26,227	3,266	125
Year 2	2007	26,083	3,329	128
Year 3	2008	26,031	3,321	128
Year 4	2009	25,994	3,378	130
Year 5	2010	26,066	3,370	129
Base Daily Per Capita Water Use ¹				128

¹ Add the values in the column and divide by the number of rows.

Table 16 Water supplies — current and projected							
Water Supply Sources		2010	2015	2020	2025	2030	2035 - opt
Water purchased from ¹ :		Wholesaler supplied volume (yes/no)					
Humboldt Bay Municipal Water District		yes					
Wholesaler 2 (enter agency name)							
Wholesaler 3 (enter agency name)							
Supplier-produced groundwater ²							
Supplier-produced surface water							
Transfers in							
Exchanges in							
Recycled Water							
Desalinated Water							
Mad River Storage and Diversions		84,000	84,000	84,000	84,000	84,000	
Other							
Total		84,000	84,000	84,000	84,000	84,000	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Volumes shown here should be what was purchased in 2010 and what is anticipated to be purchased in the future. If these numbers differ from what is contracted, show

² Volumes shown here should be consistent with Tables 17 and 18.

Table 17 Wholesale supplies — existing and planned sources of water						
Wholesale sources ^{1,2}	Contracted Volume ³	2015	2020	2025	2030	2035 - opt
Humboldt Bay Muni. Water Dist.	6994	6,994	6,994	6,994	6,994	
(source 2)						
(source 3)						

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Water volumes presented here should be accounted for in Table 16.

² If the water supplier is a wholesaler, indicate all customers (excluding individual retail customers) to which water is sold. If the water supplier is a retailer, indicate each wholesale supplier, if more than one.

³ Indicate the full amount of water

Table 18 Groundwater — volume pumped						
Basin name(s)	Metered or Unmetered ¹	2006	2007	2008	2009	2010
		N/A	N/A	N/A	N/A	N/A
Total groundwater pumped						
Groundwater as a percent of total water supply						

Units (circle one): acre-feet per year million gallons per year cubic feet per year

¹ Indicate whether volume is based on volumetric meter data or another method

Table 19 Groundwater — volume projected to be pumped					
Basin name(s)	2015	2020	2025	2030	2035 - opt
	N/A	N/A	N/A	N/A	
Total groundwater pumped					
Percent of total water supply					

Units (circle one): acre-feet per year million gallons per year cubic feet per year
Include future planned expansion

Table 20 Transfer and exchange opportunities			
Transfer agency	Transfer or exchange	Short term or long term	Proposed Volume
	N/A	N/A	N/A
Total			

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 21 Recycled water — wastewater collection and treatment							
Type of Wastewater	2005	2010	2015	2020	2025	2030	2035 - opt
Wastewater collected & treated in service area	7,270	5,852	6,442	6,603	6,768	6,937	
Volume that meets recycled water standard	7,270	5,852	6,442	6,603	6,768	6,937	

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 22 Recycled water — non-recycled wastewater disposal							
Method of disposal	Treatment Level	2010	2015	2020	2025	2030	2035 - opt
Discharge to Humboldt Bay	Secondary	5,768	6,358	6,519	6,684	6,853	
Name of method							
Name of method							
Name of method							
Total		5,768	6,358	6,519	6,684	6,853	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year

Table 23 Recycled water — potential future use							
User type	Description	Feasibility ¹	2015	2020	2025	2030	2035 - opt
Agricultural irrigation							
Landscape irrigation ²	Treatment plant irrigation		56	56	56	56	
Commercial irrigation ³							
Golf course irrigation							
Wildlife habitat							
Wetlands							
Industrial reuse	Engine coolin water at WWTP		28	28	28	28	
Groundwater recharge							
Seawater barrier							
Geothermal/Energy							
Indirect potable reuse							
Other (user type)							
Other (user type)							
Total		0	84	84	84	84	0

Units (circle one): acre-feet per year million gallons per year cubic feet per year
feasibility.
² Includes parks, schools, cemeteries, churches, residential, or other public facilities)
building use such as

Table 24 Recycled water — 2005 UWMP use projection compared to 2010 actual		
Use type	2010 actual use	2005 Projection for 2010 ¹
Agricultural irrigation	56	56
Landscape irrigation ²		
Commercial irrigation ³		
Golf course irrigation		
Wildlife habitat		
Wetlands		
Industrial reuse	28	28
Groundwater recharge		
Seawater barrier		
Geothermal/Energy		
Indirect potable reuse		
Other (user type)		
Other (user type)		
Total	84	84

Units (circle one): acre-feet per year million gallons per year cubic feet per year
¹ From the 2005 UWMP. There has been some modification of use types. Data from the
² Includes parks, schools, cemeteries, churches, residential, or other public facilities)
³ Includes commercial building use such as landscaping, toilets, HVAC, etc) and

Table 25 Methods to encourage recycled water use						
Actions	Projected Results					
	2010	2015	2020	2025	2030	2035 - opt
Grants /Monetary incentives , Free recycled water	0	0	210	220	230	
name of action						
name of action						
Total	0	0	210	220	230	0
Units (circle one): acre-feet per year million gallons per year cubic feet per year						

Table 26 Future water supply projects								
Project name ¹	Projected start date	Projected completion	Potential project	Normal-year supply ³	Single-dry year	Multiple-dry year first year	Multiple-dry year second	Multiple-dry year third year
None currently planned								
Total	0	0	0	0	0	0	0	0
Units (circle one): acre-feet per year million gallons per year cubic feet per year								
¹ Water volumes presented here should be accounted for in Table 16.								
² Indicate whether project is likely to happen and what constraints, if any, exist for project implementation.								
³ Provide estimated supply benefits, if available.								

Table 27 Basis of water year data	
Water Year Type	Base Year(s)
Average Water Year	1989
Single-Dry Water Year	1977
Multiple-Dry Water Years	1990,91,92

Table 28 Supply reliability — historic conditions					
Average / Normal Water Year	Single Dry Water Year	Multiple Dry Water Years			
		Year 1	Year 2	Year 3	Year 4
982,600	109,107	571,815	371,340	282,794	
Percent of Average/Normal Year:	11.1%	58.2%	37.8%	28.8%	

Table 29 Factors resulting in inconsistency of supply							
Water supply sources ¹	Specific source name, if any	Limitation quantification	Legal	Environment al	Water quality	Climatic	Additional information
Mad River Storage and Diversions	Ruth Res.	84,000 AF/Y	0	0	0	0	
Units (circle one): acre-feet per year million gallons per year cubic feet per year							
¹ From Table 16.							

Table 30 Water quality — current and projected water supply impacts							
Water source	Description of condition	2010	2015	2020	2025	2030	2035 - opt
Mad River Storage and Diversions		0	0	0	0	0	
Units (circle one): acre-feet per year million gallons per year cubic feet per year							

Table 31 Supply reliability — current water sources				
Water supply sources ¹	Average / Normal Water Year Supply ²	Multiple Dry Water Year Supply ²		
		Year 2011	Year 2012	Year 2013
Mad River Storage and Diversions	982,600	571,815	371,340	282,794
Percent of normal year:		58.2%	37.8%	28.8%
Units (circle one): acre-feet per year million gallons per year cubic feet per year				
¹ From Table 16.				
² See Table 27 for basis of water type years.				

Table 32 Supply and demand comparison — normal year					
	2015	2020	2025	2030	2035 - opt
Supply totals (from Table 16)	84,000	84,000	84,000	84,000	
Demand totals (From Table 1)	12,762	18,759	18,196	25,271	
Difference	71,238	65,241	64,804	58,729	
Difference as % of Supply	84.8%	77.7%	77.1%	69.9%	
Difference as % of Demand	558.2%	347.8%	356.1%	232.4%	

Units are in acre-feet per year.

Table 33 Supply and demand comparison — single dry year					
	2015	2020	2025	2030	2035 - opt
Supply totals ^{1,2}	84,000	84,000	84,000	84,000	
Demand totals ^{2,3,4}	12,762	18,759	19,196	25,271	
Difference	71,238	65,241	64,804	58,729	
Difference as % of Supply	84.8%	77.7%	77.1%	69.9%	
Difference as % of Demand	558.2%	347.8%	337.6%	232.4%	

Units are in acre-feet per year.

¹ Consider the same sources as

in Table 16. If new sources of

² Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.

³ Consider the same demands as

in Table 3. If new water

demands are anticipated, add a

⁴ The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.

Table 34 Supply and demand comparison — multiple dry-year events						
	2015	2020	2025	2030	2035 - opt	
Multiple-dry year first year supply	Supply totals ^{1,2}	84,000	84,000	84,000	84,000	
	Demand totals ²	12,762	18,759	19,196	25,271	
	Difference	71,238	65,241	64,804	58,729	
	Difference as % of Supply	84.8%	77.7%	77.1%	69.9%	
	Difference as % of Demand	558.2%	347.8%	337.6%	232.4%	
Multiple-dry year second year supply	Supply totals ^{1,2}	84,000	84,000	84,000	84,000	
	Demand totals ²	12,762	18,759	19,196	25,271	
	Difference	71,238	65,241	64,804	58,729	
	Difference as % of Supply	84.8%	77.0%	77.1%	69.9%	
	Difference as % of Demand	558.2%	347.8%	337.6%	232.4%	
Multiple-dry year third year supply	Supply totals ^{1,2}	84,000	84,000	84,000	84,000	
	Demand totals ²	12,762	18,759	19,196	25,271	
	Difference	71,238	65,241	64,804	58,729	
	Difference as % of Supply	84.8%	77.7%	77.1%	69.9%	
	Difference as % of Demand	558.2%	347.8%	337.6%	232.4%	

Units are in acre-feet per year.

¹ Consider the same sources as in Table 16. If new sources of water are planned, add a column to the table and specify the source, timing, and amount of water.

² Provide in the text of the UWMP text that discusses how single-dry-year water supply volumes were determined.

³ Consider the same demands as in Table 3. If new water demands are anticipated, add a column to the table and specify the source, timing, and amount of water.

⁴ The urban water target determined in this UWMP will be considered when developing the 2020 water demands included in this table.

Table 35 Water shortage contingency — rationing stages to address water supply shortages		
Stage No.	Water Supply Conditions	% Shortage
Stage 1	Controlled Release From Storage	
Stage 2	Optimize Available Supply - Voluntary Rationing	0%-9%
Stage 3	General Reduction	10%-15%
Stage 4	Usage Allocations	16%-30%
Stage 5	Rationing	50%

¹ One of the stages of action must be designed to address a 50 percent reduction in water supply.

Table 36 Water shortage contingency — mandatory prohibitions	
Examples of Prohibitions	Stage When Prohibition
Using potable water for street washing	red Shortage
Vehicle Washing	red Shortage
Swimming Pool Filling	red Shortage
Vegetation Watering	
Other (name prohibition)	
Other (name prohibition)	
Other (name prohibition)	

Table 37 Water shortage contingency — consumption reduction methods		
Consumption Reduction Methods	Stage When Method Takes Effect	Projected Reduction (%)
City Imposed Reductions	Declared Shortage	10%
name method		
name method		
name method		
name method		
name method		

Table 38 Water shortage contingency — penalties and charges		
Penalties or Charges	Stage When Penalty Takes Effect	
Water Waste \$50.00	Declared Shortage	
Nonessential Uses \$50.00	Declared Shortage	
Other (name penalties or charges)		
Other (name penalties or charges)		
Other (name penalties or charges)		
Other (name penalties or charges)		
Other (name penalties or charges)		
Other (name penalties or charges)		